

Of Jobs and Jail Outcomes for Washington State Property Offenders Matthew S. Landon, M.S.



Contents

Executive Summary	3
Study	3
Results and Conclusions	4
Introduction	5
Background	5
Influences on Offender Outcomes	5
Present Study	6
Methodology	6
Design	6
Variables	7
Sample	8
Results	11
Correlations	11
Correctional Variables and Outcomes	14
Demographics and Outcomes	21
Sex, Age and Outcome Interactions	24
Discussion	26
Limitations	26
Conclusions	26
References	28
Appendix 1	29

Disclaimer

This project was supported by Grant No. 2015-BJ-CX-K013 awarded by the Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice to the Office of Financial Management, Statistical Analysis Center. Points of view in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Executive Summary

In 2014, the Council of State Governments (CSG) partnered with a task force in Washington state to implement the Justice Reinvestment Initiative (JRI). The JRI supports states in conducting research on criminal justice issues to determine areas where public safety can be improved while also reallocating and saving state funds. In its analysis, CSG found that Washington has the highest property crime rates of any state in the country. It also found that for property crime convictions, Washington underuses alternatives to confinement (Council of State Governments, 2015). Ultimately, the task force recommended Senate Bill 5755 and House Bill 1885 to create a new sentencing grid for property offenders. However, the legislation was not passed.

This study establishes baseline statistics for property offender outcomes in Washington. For the purposes of this research, property offenders are defined as any adult who committed one of the offenses outlined in SB 5755/HB 1885. These include such crimes as theft, fraud and lesser degrees of burglary. This definition was selected to maintain consistency with JRI efforts in the state and to provide the Legislature with analyses useful if its members should consider new approaches to property offender sentencing.

To inform efforts to analyze or reduce property offending, this study:

- Determines the rate and speed at which property offenders recidivate and the rate and quality at which they become employed.
- Defines any inherent differences in these outcomes between demographic groups.
- Discerns which factors are associated with improved or worsened outcomes.

Study

This study combined records from the Washington State Institute for Public Policy (WSIPP), the Employment Security Department and the Department of Corrections (DOC) databases. This collected sample comprised 29,709 adults convicted of a property offense during the study period and who served and were released from DOC custody during that time.

Property offenders were more likely than average offenders in DOC custody to be female and white. Most offenders in DOC custody served the entirety of their time under community supervision. The average sentence length for the sample was 2.6 years. Thirty-four percent of those in prison had been incarcerated at some point prior to the study; 66 percent were incarcerated for the first time.

Overall recidivism by return to DOC was 34 percent for all property offenders, and rose to 59 percent when defining recidivism as any reconviction. After being released from DOC custody, 59.3 percent of offenders had been employed for at least some time. And for those who were employed, the average hourly wage was \$13.66.

Results and conclusions

The primary objective of this study was to establish baseline figures for the outcomes of property offenders in Washington. The 34 percent recidivism rate for returns to DOC closely matches DOC's recent estimate for all offenders of 32.2 percent. The employment rate of 59.3 percent and average hourly wage of \$13.66 are below the general population averages for the state. It is unclear, however, how property offenders compare to other offender groups.

Secondary findings included the significant effects employment, wages and time spent outside of confinement have on the rates and time until recidivism. While being employed was a much stronger influence on the length of time prior to any recidivism, higher wages were a more consistent predictor for lower recidivism. Of the correctional variables, spending little to no time in confinement showed the most dramatic effects on all offender outcomes, significantly reducing recidivism, increasing the time prior to recidivism and increasing employment. Although there were clear patterns for variables associated with recidivism and employment, only demographic variables such as race and sex appeared to have an effect on hourly wages.

The study's final purpose was to enumerate and account for differences in outcomes based on offender demographics. There were significant differences in recidivism and hourly wages for all races. As a general trend, any race that had a lower mean hourly wage would also have a higher recidivism rate. The greatest differences in all outcomes and variation in correctional variables were associated with offender sex, and younger age was significantly correlated with increased recidivism. While younger offenders also saw increased rates of employment they also tended to earn lower wages.

Although it is not possible to infer causation from this study, the frequency and consistency of the correlations do provide a clear message. There are factors associated with more positive outcomes for property offenders, and the state is already benefiting from them to some degree. Examining which details of employment, wages and field supervision lead to better outcomes will improve efforts to reduce property crime and achieve the goals laid out by the CSG task force.

Introduction

Background

In 2014, the Council of State Governments (CSG) partnered with a task force in Washington state to implement the federal Justice Reinvestment Initiative (JRI). The JRI supports states in conducting research on criminal justice issues to determine areas where public safety can be improved while simultaneously reallocating and saving state funds. In its analysis, CSG found that Washington had the highest property crime rates of any state in the country and underutilized alternatives to confinement (Council of State Governments, 2015). Ultimately the task force recommended legislation, Senate Bill 5755 and House Bill 1885, to create a new sentencing grid for property offenders.¹ This grid aimed to reduce recidivism and improve outcomes for property offenders, thus shrinking the burden on jails and prisons. Neither bill was passed into law during the 2015 session; the sentencing structure for property offenders remains as it was prior to CSG's report.

Inherent in the JRI mission is the notion that rehabilitative techniques are an effective way to cut state costs while increasing public safety. Rehabilitation, as explained by Cullen and Jonson (2012), is the notion that recidivism rates of offenders can be reduced through effective treatment methods — typically those validated through empirical study. Alternate perspectives suggest that prison may be a deterrent to potential offenders. Being confined may discourage offenders from recidivating and, if nothing else, at least stop them from committing crimes while incarcerated. While each of these perspectives has some level of empirical backing, any attempts to reduce recidivism through sentencing alternatives inherently draw upon rehabilitative ideas.

Rehabilitative success is typically measured in two ways. The first goal of rehabilitation is to reduce the likelihood that an offender will recidivate, which can be easily tracked given a large enough population and a sufficient time period. The second goal, of facilitating reintegration with society, is more complex to define and measure. There are numerous definitions of what constitutes successful readjustment to society. Bohm (2008) notes that an increasing number of correctional facilities are using vocational classes and employment programs to offer these opportunities. These efforts attempt to link offenders to a source of income and a regular schedule, which may help to reduce recidivism. In this sense, employment and income may work as measures for offender outcomes and could be linked to lower recidivism rates. As Washington considers next steps in addressing property crime, it is important to consider these approaches to defining offender outcomes and how various correctional approaches may affect them.

Influences on offender outcomes

Incarceration is a common tool for dealing with criminals in America. In Washington, 550 per 100,000 adults were imprisoned in 2013 (Bureau of Justice Statistics, 2014). Studies suggest, however, that incarceration may affect offender outcomes following release. In a study in Jackson

¹ See Appendix 1 for the list of state laws included as property offenses.

County, Missouri, Spohn and Holleran (2002) found that felony offenders who were *imprisoned* had higher recidivism rates than those on *probation*. While their study primarily focused on drug offenders, the recidivism rate for nondrug offenders who were incarcerated was 17 higher than for probationers. Pettit and Lyons (2009) found that incarceration also affects later noncrime earnings, regardless of age; offenders typically earn significantly less post-release than they did prior to confinement.

The effects of imprisonment on wages may also indirectly contribute to higher rates of recidivism. Shover and Honaker's (1991) findings support this idea. Their investigation into the behavior of persistent property offenders revealed that an offender's willingness to engage in crime is connected to his or her pursuit of a certain financial and social lifestyle. To reach a level of satisfaction sufficient to desist, however, offenders must first make sufficient income from a legitimate source. Kubrin and Stewart (2006) found that offenders were less likely to commit another crime if they moved into more affluent areas post-release. While this is not a direct measure of income, it suggests that some aspect of lifestyle related to income or status is related to desistance from crime.

Early studies into the relationship between employment and criminal behavior showed that a return to economic normalcy may be possible for offenders. While offenders often had lower wages to begin with, they frequently returned to their prior wage levels over time after finding employment (Witte, 1976). Orgash and Witte's (1981) study noted that the jobs offenders obtained were often undesirable and difficult to keep. Therefore while obtaining a stable occupation may lead to a return of previous wage levels over time, offenders may struggle to find consistent employment in the first place. A recent examination of community employment programs seems to support this notion, as none of the eight programs examined over two decades led to significant declines in recidivism (Visher, Winterfield, & Coggeshall, 2005). While the authors did note that they had not studied some of the more modern and promising programs, it would seem that sufficient employment is an important component in successful rehabilitation.

Present study

This study establishes baseline statistics for property offender outcomes in Washington. For the purposes of this research, property offenders are defined as any adult who committed one of the offenses outlined in <u>Senate Bill 5755</u> and companion measure <u>House Bill 1885</u> during the study period of Jan. 1, 2000, to March 31, 2015. This maintains consistency with Justice Reinvestment efforts in the state and provides the Legislature with analyses that may be relevant to the development of new approaches to property offenders. To inform future efforts to analyze or reduce property offending, this study aims to:

- Determine the rate and speed at which property offenders recidivate and the rate and quality at which they gain employment.
- Define any inherent differences in these outcomes between demographic groups.
- Discern which factors are associated with improved or worsened outcomes.

Methodology

Design

No single data set in Washington tracks offenders from conviction to employment. To determine the outcomes of property offenders, this study used databases from the Washington State Institute for Public Policy (WSIPP), the Employment Security Department's unemployment insurance (UI) program and the Department of Corrections (DOC).

The WSIPP records contained detailed information on convictions that allowed for the selection of property offenders for the study. The study focused on adults who were convicted of property offenses between Jan. 1, 2000, and March 31, 2010, and tracked them through March 2015 to identify recidivism. Following the initial property offense that added an offender to the study, subsequent offenses could fall under any offense category. In addition to offense information, the WSIPP database contained demographic information and a link system to connect to the DOC and UI databases.

The UI database collects wage and hour information from 97 percent of employers in the state, and provides wages and hours worked per quarter year for each individual from Jan. 1, 2000, to March 31, 2015. Due to the quarterly nature of this data, calculations run the risk of overlapping income and recidivism for any given time period. However, since the periods of incarceration examined in this study typically run longer than three months, it is possible to view the accuracy of these wage numbers with some confidence. Unfortunately, it is difficult to fully assess the completeness of this data for offenders, as any individual who earns no wages will appear in the same manner as one who is missing. Additionally, those who are self-employed are not captured in the UI database. Therefore, it is possible that this study may underestimate the employment rate of offenders.

Cases in DOC that matched with offenders in the WSIPP data set were linked to gain information about periods of confinement. Since this study examines offender outcomes, all those offenders who were still incarcerated at the time of the study were excluded from the sample. In addition, any offender convicted prior to Jan. 1, 2000, or after March 31, 2010, was excluded from the data set to allow for a minimum five-year follow-up period for recidivism and employment data. The final dataset included only those offenders who both committed a property offense and were in DOC custody at some point during the study period.

Variables

The demographic variables drawn from WSIPP included offender sex, race, ethnicity and birth date. Sex, race and ethnicity were coded into binary variables for the purposes of correlations and means testing, with "0" representing the absence of a trait and "1" representing its presence. This means that for the variable "Male" a value of 0 would represent a female and a mean of less than 0.5 would indicate that the group in question is more female than male. Age was calculated by subtracting each offender's birth date from his or her first date of conviction in the study. For the purposes of analysis, a second age variable was calculated to represent each offender's age upon entering DOC custody.

DOC's database contained details about the experience of offenders in custody which were coded for inclusion in the study. The percentage of time spent in confinement was calculated for each offender. Due to the large number of offenders with scores on extreme ends of the distribution, this variable was recoded into categories to reduce the skew that would occur in a continuous variable. The total time served was also calculated for each offender based on the entry to and exit from DOC custody. The study also makes use of a binary variable indicating whether the offender was entering confinement for the first time during this study. Any offender with no time spent in confinement was not included in this variable. The outcome variables of the study were calculated using a combination of WSIPP, UI and DOC records. Recidivism was defined either as a second conviction date or a second entry date into DOC custody, and the time until recidivism was calculated as the difference between these dates. Because DOC provided the only information on incarceration and supervision, employment and wages were calculated only between releases from and returns to DOC custody. Any amount of income in that time period was coded as employment, and wages per hour were averaged among all working quarters during the time period prior to any recidivism. Some incomes, hours and recidivism dates were illogical, such as entries in negative numbers, and were coded as missing for the study.

Sample

Following the linkage of the WSIPP, UI and DOC databases and the removal of incomplete or missing cases, the final study sample contained 29,709 adult property offenders. Because all the included offenders spent at least some time in DOC custody, it is possible to compare the sample to the current demographics of the DOC population to search for variations.

As shown in Table 1, there was a higher percentage of female property offenders in this study than there was in the overall DOC population which included all offender types. Whites were slightly overrepresented. The property offender sample contained fewer minorities such as blacks and American Indian/Alaska Natives (AIAN) and contained those with a significantly lower average age. These discrepancies are noteworthy, as being male and being younger are among the more potent predictors of recidivism (Gendreau, Little & Goggin, 1996). This also has implications for overall group composition, as other studies have found female property offenders to be less likely to be sentenced to time in prison (Rodriguez, Curry, & Lee, 2006).

	Present Study	DOC 2016 ²
Sex		1
Male	68.2%	92.2%
Female	31.8%	7.8%
Race		
White	79.5%	71.6%
Black	10.6%	18.4%
Asian	2.6%	3.7%
AIAN	1.2%	4.6%
Mixed	5.7%	
Other	0.3%	0.9%
Unknown	0.1%	0.8%
Ethnicity		
Hispanic	8.7%	13.1%
Non-Hispanic	91.3%	86.9%
Age		
18-22	36.7%	
23-27	23.3%	
28-32	15.8%	
33-37	12.6%	
38-42	8.7%	
43+	2.9%	
Average	27	38.6

Table 1. Characteristics of Property Offenders Compared to Current DOC Population

Table 2 displays the sample distribution across correctional variables. Nearly 70 percent of the sample entered DOC custody immediately following their first property offense conviction inside the study period and an additional 20 percent entered DOC within a year. Once in DOC custody, the majority of the sample spent the entirety of their time outside of confinement, with the average time in custody lasting 2.6 years. DOC custody consists of a variety of scenarios, including probation, community supervision, work release and confinement in prison. The fact that 65.8 percent of offenders spent the entirety of their sentence in community supervision contrasts sharply with CSG's finding that only 10 percent of offenders in Washington are given this option. This implies that the definition of property offenses created by SB 5755 may be targeting a group that can already benefit from less restrictive sentencing options. It may also be possible that property offenders have significant overlaps with other groups such as drug offenders, who are eligible for Drug Offending Sentencing Alternatives.

² Retrieved from <u>http://www.doc.wa.gov/information/data/docs/fact-card.pdf</u>.

Length of DOC Custody						
<1 Year	18.9%					
1-2 Years	30.0%					
2-5 Years	40.4%					
5+ Years	10.7%					
Average (years)	2.6					
Percentage of Sentence Sp	ent in Confinement					
0%	65.8%					
1%-24%	17.1%					
25%-49%	8.1%					
50%-74%	3.6%					
75%-99%	1.4%					
100%	4.0%					
Prior Prison	Time					
First Time	65.8%					
Not First	34.2%					
Time from First Convi	ction to Prison					
0 months	69.8%					
0-2 months	13.3%					
2-6 months	4.6%					
6-12 months	3.4%					
12+ months	8.9%					

Table 2. Correctional Variables for Property Offenders

Offender outcomes are measured by recidivism and employment, along with variables gauging the quality of these outcomes through the time to recidivism and wages per hour. The averages for this sample are shown in Table 3, with 34 percent of the sample returning to DOC custody at least once. This figure is close to DOC's estimate of 32.2 percent for all offenses over a three-year period (Department of Corrections, 2016) and is also near the 31.2 percent rate of felony recidivism found in a study by Benedict and Huff-Corzine (1997) examining male property offenders on probation. When including convictions that do not result in a return to DOC custody (such as jail time or fines) there is a significantly higher recidivism rate of 59.3 percent. If recidivism is tracked from the time of first conviction in the sampling frame, then the rate of reconviction is even higher. Since this study focuses primarily on the effects of prison, the main recidivism measures considered are those that occur following an initial release from DOC custody.

Offender employment rates and wages post-release are also shown in Table 3 and are notably lower than Washington averages. This study covers the period from 2000 to 2015, during which full-time wages for the general population averaged \$24.57 per hour (Office of Financial Management, 2014). The average earnings of offenders who are employed post-release were nearly half that, at \$13.66 per hour. Offender employment itself is low. The overall unemployment rate in Washington averaged 6.7 percent compared to the 40.7 percent for offenders in the study (Office of Financial

Management, 2015). While it is possible that this employment gap could shrink if there are missing data from the UI database, it is unlikely that it would close altogether.

Recidivism						
Property conviction to any conviction	68.7%					
DOC to any conviction	59.3%					
DOC to DOC	34.0%					
Average Time to Recidivism (Months)						
Property conviction to any conviction	24.1					
DOC to any conviction	27.0					
DOC to DOC	32.5					
Post-Release Employment						
Employed	59.3%					
Average wage per hour	\$13.66					

Results

Correlations

Correlations are useful to quickly identify variables that may be associated with one another. They also indicate the direction of any relationship found, with positive correlations showing that the variables increase and decrease together while negative correlations showing that one increases as the other decreases. For the purposes of this study, correlations provide a sense as to which demographic and correctional factors are associated with certain outcomes for property offenders. As correlations need a robust sample size to produce reliable results, the variables "Other Race" and "Unknown" were excluded from the analysis due to having too few cases.

As seen in Table 4, the largest effect sizes are generally seen with regard to sex, with males having higher rates of recidivism as well as higher wages and slightly higher employment. For the most part, these correlations form a pattern across the various demographic groups, with increases in recidivism matching decreases in employment and wages for the same demographic variable. The major exception to this rule appears to be age, which is negatively correlated with both recidivism and employment but positively with wages. This implies that younger offenders are both more likely to be employed and to recidivate, but not to earn a higher wage.

	Recidivism- Any Conviction	Time to New Conviction	Recidivism- Return to DOC	Time to Return to DOC	Employed	Wage per Hour
Male	0.189***	-0.082***	0.203***	-0.021	0.024*	0.131***
White	-0.047***	0.013	-0.048***	0.023*	0.059***	0.051***
Black	0.061***	-0.008	0.043***	-0.03**	-0.023	-0.053***
Asian	-0.155***	0.000	-0.106***	-0.005	0.017	0.02*
AIAN	0.205***	-0.011	0.135***	0.008	-0.162***	-0.022*
Mixed	0.092***	-0.006	0.089***	-0.002	-0.051***	-0.023*
Hispanic	-0.045***	-0.011	0.011	0.017	-0.102***	-0.051***
Age	-0.109***	0.023*	-0.128***	-0.028*	-0.14***	0.105***

Table 4. Correlation of Demographics with Outcome Variables³

Note: * = p < .05, ** = p < .01, *** = p < .001

Table 5 continues the examination of correlations by comparing the correctional variables to the outcomes of property offenders. The main trend in significant correlations is between the percentage of time confined and any of the outcomes. Spending a lower percentage of time in confinement is associated with lower convictions and lower returns to DOC, longer periods of time until recidivism and higher rates of employment and wages upon release. Those offenders who were placed in confinement for the first time during this study were less likely to be reconvicted **in general**, but more likely to return to DOC custody **upon conviction** than those who had a period of confinement prior to the study period. First-time prisoners were also more likely to find employment post-release and to have a higher hourly wage upon employment. Spending a greater amount of time in DOC custody was associated with lower reconviction, but also with lower rates of employment. Longer sentences also corresponded with slightly higher wages.

³ The presence of dichotomous variables such as sex or race necessitated the use of point biserial and tetrachoric correlations in some instances to increase the accuracy of the predicted effect strength. It is also important to note that correlation coefficients between -0.30 and 0.30 are generally considered to be weak and those between -0.10 and 0.10 are considered very weak if they are statistically significant.

	First Confinement	Total DOC Time	Percent Time Confined
Recidivism- any conviction	-0.083***	-0.046***	0.068***
Time to new conviction	0.019	0.000	-0.104***
Recidivism- return to DOC	0.066***	-0.004	0.141***
Time to return to DOC	-0.028	0.003	-0.106***
Employed	0.038*	-0.082***	-0.084***
Wage per Hour	0.057***	0.018*	-0.027***

Table 5. Correlation of Correctional Variables with Outcome Variables

Note: * = p < .05, ** = p < .01, *** = p < .001

As discussed at the beginning of this report, a number of prior studies have found support for the claim that employment and income are associated with lower rates of recidivism. Table 6 shows correlations between the outcome variables for property offenders in this study. As the patterns in Table 4 suggest, wages are indeed associated with lower recidivism rates and slightly longer time periods prior to recidivism for both returns to DOC and any subsequent conviction. Employment has even greater effects in lengthening the time to recidivism, but is less consistent at reducing all forms of recidivism. Surprisingly, employment is negatively correlated with returns to DOC custody but is positively correlated with recidivism by any new conviction. The pairing of these correlations suggests that while property offenders employed post-release are less likely to return to DOC, they are more likely to be convicted of another offense than those who remain unemployed. As may be expected, this particular relationship is somewhat complex and is explored in greater detail later on.

Table 6. Correlations between Outcome Variables

	Recidivism- Any Conviction	Time to New Conviction	Recidivism- Return to DOC	Time to Return to DOC
Employed	-0.170***	0.341***	0.132***	0.178***
Wage per hour	-0.154***	0.053***	-0.138***	0.078***

Note: *** = p < .001

Correctional variables and outcomes

A number of the studies discussed earlier in this report suggest that aspects of correctional intervention can have a significant effect on post-release employment and recidivism. Figure 1 illustrates the differences in employment and recidivism outcomes based on the percentage of DOC custody spent incarcerated. The chart indicates that those who spend the entirety of their sentence in community supervision are considerably less likely to return to DOC and more likely to be employed as compared to any other grouping. Differences in recidivism and employment are much less pronounced between groups that spent any portion of their time in confinement.



Figure 1. Outcomes by Percentage of DOC Custody Spent in Confinement

Figure 2 shows differences in outcome based on the length of DOC custody alone. While there are no significant variations between custody times of less than five years, those who served a sentence of five or more years undergo a notable drop in both recidivism and employment. Naturally, any offender released after a longer sentence will be older and will have less time to re-enter the data set. As shown previously in Table 4, age is negatively correlated with both measures of recidivism and employment, and may be a partial explanation for this variation.



Figure 2. Outcomes by Total Length of DOC Custody

Besides the effects of the total time in DOC custody and the percentage of that time spent in confinement, it is useful to consider differences in outcomes based on the experience of property offenders with previous confinement. Figure 3 compares property offenders who were not confined at all with those who were confined for the first time and those who had been imprisoned at least once prior to the study period. Variations between the two groups who were confined are relatively small, with much more significant differences occurring between those who were confined and those who were not.



Figure 3. Outcomes by First-Time Confinement

Tables 7, 8 and 9 show a comparison of means⁴ following an analysis of variance performed on the percentage of time spent confined. The differences in means are calculated as differences in the average months prior to recidivism, or as differences in the average wages earned. For both definitions of recidivism, those with 0 percent confinement have a statistically significant difference in means against every other category. As these differences in means are positive, this indicates that offenders who are not confined go longer on average without recidivating than those who have any time behind bars. In the case of recidivism by returning **to any form of DOC custody**, the lower category of 1–24 percent is also significantly higher than the two middle categories. Interestingly, the differences in means peak against the mid-range categories, suggesting that they have the lowest mean time to recidivism. Differences in means for hourly wages were largely insignificant, with small statistically significant differences found between the lower groups.

⁴ Each analysis of variance produced an F statistic which indicates the overall statistical significance of differences between variable means. The comparison of means was collected from post-hoc Tukey tests, which detail the differences between specific variables rather than the entire set as a whole.

	0%	1%-24%	25%-49%	50%-74%	75%- 99 %	100%	F Value
0%		7.16*	8.82*	7.64*	7.85*	6.86*	66.85*
1%-24%	-7.16*		1.66	0.48	0.69	-0.30	
25%-49%	-8.82*	-1.66		-1.18	-0.97	-1.97	
50%-74%	-7.64*	-0.48	1.18		0.21	-0.78	
75%-99%	-7.85*	-0.69	0.97	-0.21		-0.99	
100%	-6.86*	0.30	1.97	0.78	0.99		

Table 7. Difference Between Means Within Percentage Confined For Recidivism by Any Conviction⁵

Note: * = p < .05

Table 8. Difference Between Means Within Percentage Confined for Recidivism by Return to DOC

	0%	1%-24%	25%-49%	50%-74%	75%- 99 %	100%	F Value
0%		4.94*	8.58*	10.77*	8.47*	7.89*	30.65*
1%-24%	-4.94*		3.65*	5.84*	3.53	2.95	
25%-49%	-8.58*	-3.65*		2.19	-0.11	-0.70	
50%-74%	-10.77*	-5.84*	-2.19		-2.30	-2.89	
75%-99%	-8.47*	-3.53	0.11	2.30		-0.58	
100%	-7.89*	-2.95	0.70	2.89	0.58		

Note: * = p < .05

Table 9. Difference Between Means Within Percentage Confined for Wage Per Hour

	0%	1%-24%	25%-49%	50%-74%	75%- 99 %	100%	F Value
0%		1.13*	0.06	0.40	0.68	0.93	8.99*
1%-24%	-1.13*		-1.07*	-0.73	-0.45	-0.20	
25%-49%	-0.06	1.07*		0.34	0.62	0.87	
50%-74%	-0.40	0.73	-0.34		0.28	0.53	
75%-99%	-0.68	0.45	-0.62	-0.28		0.25	
100%	-0.93	0.20	-0.87	-0.53	-0.25		

Note: * = p < .05

Where the preceding tables examined differences in means for the percentage of time spent confined, Tables 10, 11 and 12 show the results of a comparison of means for total time served. Those who serve less than one year and those who serve more than five years had significantly lower mean times until either type of recidivism. In both cases, the middle categories do not significantly differ from one another. While these tests are statistically significant, the differences in means are not as pronounced as for the percentage of time spent in confinement. As shown in Table 12, the amount of time served had no significant differences in means related to hourly wage post-release.

⁵ The means in Tables 7 through 12 are calculated by subtracting each column variable from the row variable. For example, those who spend 0 percent of their sentence in confinement take 7.16 months longer to be reconvicted than those who spend 1–24 percent of their time in confinement.

	<1 Year	1-2 Years	2-5 Years	5+ Years	F Value
<1 year		-3.31*	-3.69*	3.40*	40.52*
1-2 years	3.31*		-0.38	6.71*	
2-5 years	3.69*	0.38		7.09*	
5+ years	-3.40*	-6.71*	-7.09*		

Table 10. Difference Between Means Within Total Time in DOC for Recidivism by Any Conviction

Note: * = p < .05

Table 11. Difference Between Means Within Total Time in DOC for Recidivism by Return to DOC

	<1 Year	1-2 Years	2-5 Years	5+ Years	F Value
<1 year		-3.60*	-4.11*	2.49	19.09*
1-2 years	3.60*		-0.51	6.09*	
2-5 years	4.11*	0.51		6.60*	
5+ years	-2.49	-6.09*	-6.60*		

Note: * = p < .05

Table 12. Difference Between Means Within Total Time in DOC for Wage Per Hour

	<1 Year	1-2 Years	2-5 Years	5+ Years	F Value
<1 year		-0.13	-0.34	-0.53	2.00
1-2 years	0.13		-0.20	-0.40	
2-5 years	0.34	0.20		-0.19	
5+ years	0.53	0.40	0.19		

Note: * = p < .05

Figures 4 and 5 display the results of a Kaplan-Meier test which shows the time until recidivism across different groups. These provide a visual display of some of the differences in means noted in the Tukey tests discussed above. In both graphs comparing confinement percentages to recidivism, those offenders who spend none of their time in confinement recidivate less and have a shallower curve. For the graphs comparing the total time served categories, the differences are much more difficult to see, although they are still statistically significant. For all the graphs, recidivism was capped at five years to allow for equal observation times across all offenders. This causes some of the final recidivism percentages to appear lower than they are reported elsewhere in the document.



Figure 4. Time to Recidivism - Any Conviction by Percentage Confined and Total Time in DOC



Figure 5. Time to Recidivism - Return to DOC by Percentage Confined and Total Time in DOC

Demographics and outcomes

Because demographic characteristics are typically static variables that cannot be manipulated, they are generally not useful in attempts to affect outcomes in an offender group. However, it is important for future research and analyses to account for known differences between sex, race and ethnicity that may create unexpected disparity. Table 13 contains a series of t-tests showing differences in means between various demographic groups. A number of these groups were found to contain unequal variances, and in these cases a Satterthwaite Approximation⁶ was used for increased accuracy of results.

The most consistent differences in means are found in the recidivism variables, with nearly every demographic experiencing statistically significant variations. Females, whites, Asians and Hispanics are generally less likely to recidivate, whereas males, blacks, AIAN and mixed race offenders have higher average recidivism. Hourly wage also had significant differences in means for all demographics, generally following the pattern that any group with higher recidivism would have a lower average wage. The exception to this trend were males, who had both higher recidivism and wages, and Hispanics, who had both lower recidivism and wages. Employment and time to recidivism had less consistency with significant results, although it is worth noting that receiving higher average wages does not equate to a higher average employment.

⁶ The statistical techniques used in t-tests assume that both groups (e.g. whites and nonwhites) have a similar distribution. When that is not the case, using a Satterthwaite Approximation allows for a more accurate prediction of the statistical significance for any differences between the means.

		Recidivate- Conviction		Months to Conviction		Employment	
		Mean (SD)	t value	Mean (SD)	t value	Mean (SD)	t value
Male	0	0.51 (0.49)	-20.12***	30.62 (29.09)	10.96***	0.58 (0.49)	-2.5*
	1	0.63 (0.48)		25.62 (26.17)		0.60 (0.49)	
W/bito	0	0.62 (0.49)	4.50***	26.31 (26.25)	-1.71	0.56 (0.50)	-5.67***
WINC	1	0.59 (0.49)		27.17 (27.32)		0.60 (0.49)	
Dlook	0	0.59 (0.49)	-4.92***	27.06 (27.17)	1.00	0.59 (0.49)	1.85
DIACK	1	0.63 (0.48)		26.41 (26.41)		0.58 (0.49)	
Acian	0	0.60 (0.49)	8.21***	26.98 (27.11)	0.01	0.59 (0.49)	-0.85
Asiali	1	0.45 (0.50)	-	26.97 (26.41)		0.60 (0.49)	
ΔΙΔΝ	0	0.59 (0.49)	-7.44***	27.02 (27.14)	1.42	0.59 (0.49)	6.47***
AIAN	1	0.78 (0.41)		24.73 (23.99)		0.42 (0.50)	
Mixod	0	0.59 (0.49)	-6.07***	27.03 (27.15)	0.85	0.60 (0.49)	3.41***
WINCU	1	0.66 (0.47)		26.34 (26.33)		0.55 (0.50)	
Hispanic	0	0.60 (0.49)	3.46***	27.08 (27.15)	1.51	0.60 (0.49)	7.79***
пізрапіс	1	0.56 (0.50)		25.95 (24.59)		0.52 (0.50)	
		Recidiva	te- DOC	Months to DOC		Wage per Hour	
		Mean (SD)	t value	Moan (SD)	t value	Maan (CD)	
Malo			(Value	weart (SD)	i value	iviean (SD)	t value
Male	0	0.26 (0.44)	-20.51***	33.61 (30.76)	2.13*	12.01 (5.81)	t value -17.59***
Male	0 1	0.26 (0.44) 0.38 (0.49)	-20.51***	33.61 (30.76) 32.10 (30.35)	2.13*	12.01 (5.81) 14.41 (9.35)	t value -17.59***
Male	0 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48)	-20.51*** 4.57***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10)	2.13* -2.26*	12.01 (5.81) 14.41 (9.35) 12.79 (8.18)	-17.59***
Male White	0 1 0 1	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47)	-20.51*** 4.57***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81)	2.13* -2.26*	Mean (SD) 12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54)	-17.59*** -6.71***
Male White	0 1 0 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47)	-20.51*** 4.57***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15)	2.13* -2.26*	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46)	t value -17.59*** -6.71*** 6.98***
Male White Black	0 1 0 1 0 1	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48)	-20.51*** 4.57*** -3.39***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32)	2.13* -2.26* -3.00***	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54)	-17.59*** -6.71*** 6.98***
Male White Black	0 1 0 1 0 1 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47)	-20.51*** 4.57*** -3.39*** 5.13***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88)	2.13* -2.26* -3.00*** 0.54	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49)	t value -17.59*** -6.71*** 6.98***
Male White Black Asian	0 1 0 1 0 1 0 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47) 0.25 (0.44)	-20.51*** 4.57*** -3.39*** 5.13***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88) 31.40 (27.45)	2.13* -2.26* 3.00*** 0.54	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49) 14.66 (8.06)	-17.59*** -6.71*** 6.98*** -2.72**
Male White Black Asian	0 1 0 1 0 1 0 1 0 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47) 0.25 (0.44) 0.34 (0.47)	-20.51*** 4.57*** -3.39*** 5.13***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88) 31.40 (27.45) 32.43 (31.83)	2.13* -2.26* 3.00*** 0.54 -0.80	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49) 14.66 (8.06) 13.68 (8.50)	t value -17.59*** -6.71*** 6.98*** -2.72** 2.91**
Male White Black Asian AIAN	0 1 0 1 0 1 0 1 0 1 0 1	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47) 0.25 (0.44) 0.34 (0.47) 0.48 (0.50)	-20.51*** 4.57*** -3.39*** 5.13*** -5.19***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88) 31.40 (27.45) 32.43 (31.83) 34.35 (29.68)	2.13* -2.26* 3.00*** 0.54 -0.80	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49) 14.66 (8.06) 13.68 (8.50) 11.69 (4.90)	t value -17.59*** -6.71*** 6.98*** -2.72** 2.91**
Male White Black Asian AlAN	0 1 0 1 0 1 0 1 0 1 0 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47) 0.25 (0.44) 0.34 (0.47) 0.48 (0.50) 0.34 (0.47)	-20.51*** 4.57*** -3.39*** 5.13*** -5.19*** -6.02***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88) 31.40 (27.45) 32.43 (31.83) 34.35 (29.68) 32.48 (30.39)	2.13* -2.26* -3.00*** -0.54 -0.80 -0.16	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49) 14.66 (8.06) 13.68 (8.50) 11.69 (4.90) 13.71 (8.51)	t value -17.59*** -6.71*** 6.98*** -2.72** 2.91** 3.04**
Male White Black Asian AIAN Mixed	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47) 0.25 (0.44) 0.34 (0.47) 0.48 (0.50) 0.34 (0.47) 0.41 (0.49)	-20.51*** 4.57*** -3.39*** 5.13*** -5.19*** -6.02***	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88) 31.40 (27.45) 32.43 (31.83) 34.35 (29.68) 32.48 (30.39) 32.28 (31.26)	2.13* -2.26* 3.00*** 0.54 -0.80 0.16	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49) 14.66 (8.06) 13.68 (8.50) 11.69 (4.90) 13.71 (8.51) 12.84 (7.88)	t value -17.59*** -6.71*** 6.98*** -2.72** 2.91** 3.04**
Male White Black Asian AlAN Mixed	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	0.26 (0.44) 0.38 (0.49) 0.36 (0.48) 0.33 (0.47) 0.34 (0.47) 0.37 (0.48) 0.34 (0.47) 0.25 (0.44) 0.34 (0.47) 0.48 (0.50) 0.34 (0.47) 0.41 (0.49) 0.34 (0.47)	-20.51*** 4.57*** -3.39*** 5.13*** -5.19*** -6.02*** -0.82	33.61 (30.76) 32.10 (30.35) 31.16 (29.10) 32.83 (30.81) 32.79 (32.15) 29.92 (28.32) 32.49 (31.88) 31.40 (27.45) 32.43 (31.83) 34.35 (29.68) 32.48 (30.39) 32.28 (31.26) 32.30 (30.37)	2.13* -2.26* 3.00*** 0.54 -0.80 0.16 -1.66	12.01 (5.81) 14.41 (9.35) 12.79 (8.18) 13.87 (8.54) 13.80 (8.46) 12.34 (8.54) 13.64 (8.49) 14.66 (8.06) 13.68 (8.50) 11.69 (4.90) 13.71 (8.51) 12.84 (7.88) 13.79 (8.67)	t value -17.59*** -6.71*** 6.98*** -2.72** 2.91** 3.04** 6.75***

Table 13. Difference Between Means for Demographic Variables and Outcomes⁷

Note: * = p < .05, ** = p < .01, *** = p < .001

⁷ T values compare the value of the first mean (0) to that of the second mean (1). Negative t values appear when the first mean is less than the second one. For example, females have a reconviction rate of 51 percent as opposed to 63 percent for males, which results in a corresponding t value of -20.12.

Though it was not an original purpose of the study to relate demographics to correctional variables, it is important to examine their relationship to check for possible confounding of statistical tests. Table 14 shows a second series of t-tests comparing the means of correctional variables among demographic groups. The main significant results appear for sex, with males more likely to serve more time in confinement, have longer sentences overall and be less likely to have been confined previously. Whites and Asians are less likely to serve longer amounts of confinement time whereas AIAN and mixed race groups are more likely to have higher proportions of confinement. Asians are also more likely to serve a shorter time in DOC custody, and Hispanics are slightly more likely to have not been confined before, compared to non-Hispanics. While there are some statistically significant effects among the demographics, the only ones large enough to cause concern of confounding are those related to offender sex. This effect is examined in the following section.

		Percentage of Time Confined		Total Time in DOC Custody		First Time Confined	
		Mean (SD)	t value	Mean (SD)	t value	Mean (SD)	t value
Mala	0	0.52 (1.12)	16 17***	2.34 (0.88)	10 00***	0.58 (0.49)	-10.17***
Male	1	0.78 (1.29)	-10.47	2.47 (0.93)	-12.29	0.69 (0.46)	
\//bita	0	0.74 (1.28)	0.00**	2.43 (0.50)	0.50	0.65 (0.49)	-0.92
white	1	0.69 (1.24)	2.89	2.43 (0.48)	-0.50	0.66 (0.45)	-
Dlook	0	0.69 (1.25)	0.76	2.43 (0.91)	1 17	0.66 (0.47)	1.56
BIACK	1	0.71 (1.24)	-0.76	2.45 (0.95)	-1.17	0.64 (0.48)	-
Acian	0	0.70 (1.25)	2 20***	2.43 (0.91)	1 E0***	0.66 (0.47)	0.72
Asian	1	0.55 (1.16)	3.30	2.28 (0.94)	4.39	0.63 (0.48)	-
ΔΙΔΝΙ	0	0.69 (1.24)	2 / 2***	2.43 (0.91)	0.40	0.66 (0.47)	-0.41
AIAN	1	0.93 (1.41)	-3.02	2.45 (0.98)	-0.40	0.67 (0.47)	-
Mixed	0	0.69 (1.24)	E 77***	2.43 (0.91)	0.64	0.66 (0.47)	-0.72
	1	0.87 (1.36)	-0.77	2.44 (0.92)	-0.04	0.67 (0.47)	
Hispania	0	0.69 (1.24)	1 00	2.43 (0.91)	0.47	0.65 (0.48)	-2.73**
HISPANIC	1	0.74 (1.28)	-1.00	2.42 (0.94)	0.47	0.70 (0.46)	

Table 14. Difference Between Means for Demographic Variables and Correctional Variables

Note: * = p < .05, ** = p < .01, *** = p < .001

Sex, age and outcome interactions

Most of the variables included in this study follow trends and have not shown significant enough effects to potentially be confounding variables. There are some exceptions, however. In Table 4, it was shown that offender age was negatively correlated with both recidivism and employment, while most other variables had a negative association with only one or the other. For offender sex, these relationships were all positive. This suggests that offender age and sex may have more complex interactions with outcomes than a single correlation can show, and require further investigation.

Table 15 investigates the relationship between age, employment and recidivism in more detail by measuring the differences in average recidivism among employed and unemployed offenders in various age groups. When considering any conviction, employed offenders recidivate at higher rates until they reach higher age groups. At that point, the interaction ceases to be significant, showing that the connection between employment and reconviction is at least partially attributable to younger offenders. Strangely, this effect does not appear to exist for returns to DOC, with employed offenders returning to DOC custody at lower rates for all age categories.

		Recidivate- Any Conviction		Recidivate- Return to DOC		
	Employed	Mean (SD)	t value	Mean (SD)	t value	
10 22	0	0.59 (0.49)	7 01***	0.49 (0.50)	14.8***	
10-22	1	0.66 (0.47)	-7.01	0.35 (0.48)		
22.27	0	0.52 (0.50)	0 70***	0.39 (0.49)	8.65***	
23-21	1	0.63 (0.48)	-0.73	0.29 (0.45)		
28-32	0	0.52 (0.50)	1 74***	0.37 (0.48)	7 00***	
	1	0.59 (0.49)	-4.70	0.27 (0.44)	7.08	
33-37	0	0.52 (0.50)	2 5 4 ***	0.35 (0.48)	7 5 1***	
	1	0.58 (0.49)	-3.30	0.24 (0.43)	7.54	
38-42	0	0.49 (0.50)	1 0 2	0.29 (0.45)	1 71***	
	1	0.53 (0.50)	-1.82	0.20 (0.40)	4.71	
43+	0	0.44 (0.50)	0.67	0.23 (0.42)	2 / 1 ***	
	1	0.41 (0.49)	0.07	0.13 (0.34)	3.43	

Table 15. Differences in Means for Employment and Recidivism Grouped by Age

Note: * = p < .05, ** = p < .01, *** = p < .001

A second potentially confounding variable is offender sex, which was noted in the previous section for large differences in means between males and females. Table 16 compares employment with recidivism, and recidivism with wages grouped by male and female offenders. While most of the differences in means remain significant for the outcome variables when males and females are separated, there is an exception for employment's association with reconviction. Employed males are significantly more likely to reoffend with any offense than unemployed males, but females have no difference between means. Females and males share trends in mean differences for the other outcome variables, so this finding bears particular consideration. Although employment's positive association with reconviction can be partially explained by age, it appears to maintain a robust effect on males.

		Recidivate- Any Conviction			Recidiv Return to	vate- DOC
	Employed	Mean (SD)	t value	Employed	Mean (SD)	t value
Female	0	0.51 (0.50)	0.94	0	0.34 (0.48)	14 50***
1 cinale	1	0.51 (0.50)		1	0.20 (0.40)	10.50
Male	0	0.58 (0.50)	-18.17***	0	0.43 (0.49)	11 70***
Marc	1	0.68 (0.47)		1	0.35 (0.48)	11.72
		Wage Per Hour			Wage Per Hour	
	Recidivism- Any	Mean (SD)	t value	Recidivism- DOC	Mean (SD)	t value
Female	0	13.37 (6.74)	17 / 1***	0	12.52 (6.03)	10 1/***
Temale	1	10.68 (4.34)	17.01	1	9.91 (4.22)	13.40
Male	0	16.46 (10.74)	16 61***	0	15.63 (9.72)	10 0/***
	1	13.46 (8.46)	10.01	1	12.12 (8.13)	19.94

Table 16. Differences in Means for Outcome Variables Grouped by Sex

Note: * = p < .05, ** = p < .01, *** = p < .001

Discussion

Limitations

As mentioned previously, this study excluded some property offenders in order to more closely examine those who served time and were released from DOC. Consequently, property offenders who never entered DOC during the study period were excluded, and the results of this study cannot reliably be generalized to them. Similar to any data set, some records contained in the WSIPP, UI and DOC databases did not match with one another and were excluded. It is possible that some of the offenders removed from the study in either manner could alter the rates of the outcomes, so it is important to report these findings as being limited to property offenders who entered and exited DOC custody during the study period.

Additionally, this study did not look for differences between types of property offense, nor was any attempt made to differentiate the risk levels posed by different offenders. It is likely that at least some of the variation in recidivism rates between property offenders who were confined and those who were not is due to lower-risk offenders being selected for field supervision. Because it is not possible to estimate how many of the correlations or differences in means may be caused by this selection, it is important to be cautious while interpreting these results. This study cannot provide evidence of causation, but instead offers correlations and means on which to base future analyses and evaluations.

Conclusions

The primary objective of this study was to establish baseline figures for the outcomes of property offenders in Washington. The overall recidivism rate of 34 percent for returns of property offenders to DOC closely matches DOC's recent estimate for all offenders of 32.2 percent. This implies that property offenders are roughly similar to the general DOC population in terms of recidivism. The employment rate of 59.3 percent and average hourly wage of \$13.66 are significantly lower than the general population averages of the state, but it is unclear how property offenders compare to other offender groups. Future studies may do well to seek comparisons with other offense types to create a better context for these figures.

Secondary findings for this study included the significant effects employment, wages and time spent outside of confinement have on rates and time until recidivism. While simply being employed was a much stronger influence on the length of time prior to any recidivism, higher wages were a more consistent predictor for lower recidivism. Of the correctional variables, the percentage of time spent in confinement showed the most dramatic effects on all offender outcomes, significantly reducing recidivism, increasing the time prior to recidivism and increasing employment. Although there were clear patterns for variables associated with recidivism and employment, the only highly significant associations with hourly wage came from demographic variables. Considering the body of literature and the statistical tests from this study that show higher wages correlating with lower recidivism, it would be a worthwhile endeavor for future studies to investigate the factors that contribute to higher post-release wages.

The final purpose of this study was to enumerate and account for differences in outcomes among offender demographics. There were significant differences in recidivism and wages earned per hour for all races. As a general trend, any race that had a lower mean hourly wage also had a higher recidivism rate. Offender sex contained the largest differences between means across all outcomes and correctional variables, signaling that it may be a confounding factor. This is of particular

relevance to future studies on property offenders, as nearly one-third of the sample is female as opposed to the more typical 8 percent of all offenders. Age also played a role as a confounding variable, with younger offenders more likely to find employment as well as more likely to recidivate, contrary to the trend followed by the general sample.

Although it is not possible to infer causation from this study, the frequency and consistency of the correlations do provide a clear message. There are factors associated with better outcomes for property offenders, and the state is already benefiting from them to some degree. Examining which details of employment, wages and community supervision lead to improved outcomes will put the state much closer to further reducing property crime and achieving the goals laid out by the CSG task force.

References

- Benedict, W. R. & Corzine, L. H. (1997). Return to the scene of the punishment: Recidivism of adult male property offenders on felony probation, 1986-1989. *Journal of Research in Crime and Delinquency*, 34(2), 237-252.
- Bohm, R. M. (2008). A concise introduction to criminal justice. New York, NY: McGraw-Hill Companies.
- Bureau of Justice Statistics. (2014). *Correctional Populations in The United States, 2013*. Washington, D.C.: Lauren E. Glaze & Danielle Kaeble.
- Council of State Governments. (2015). Justice Reinvestment in Washington Analysis Policy and Framework. Washington, D.C.: Karen Chung.
- Cullen, F. T., & Jonson, C. L. (2012). Correctional theory: Context and consequences. Thousand Oaks, CA: Sage Publishing.
- Department of Corrections. (2016). [Department of Corrections demographic and status information about supervised adults June 30, 2016]. *Fact Card.* Retrieved from http://www.doc.wa.gov/information/data/docs/fact-card.pdf
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult recidivism: What works! *Criminology*, 34(4), 575-607.
- Kubrin, C. E. & Stewart, E. A. (2006). Predicting who reoffends: The neglected role of neighborhood context in recidivism studies. *Criminology*, 44(1), 165-197.
- Office of Financial Management. (2015). [Graph illustration comparing Washington unemployment to federal unemployment]. Unemployment rate. Retrieved from http://www.ofm.wa.gov/trends/economy/fig105.asp
- Office of Financial Management. (2014). [Graph illustration comparing Washington wages to federal wages]. *Washington and U.S. Average Wages*. Retrieved from <u>http://www.ofm.wa.gov/trends/economy/fig102.asp</u>
- Orsagh, T. & Witte, A. D. (1981). Economic status and crime: Implications for offender rehabilitation. *The Journal of Criminal Law & Criminology*, 72(3), 1055-1071.
- Pettit, B. & Lyons, C. J. (2009). Incarceration and the legitimate labor market: Examining age-graded effects on employment and wages. *Law & Society Review*, 43(4), 725-756.
- Rodriguez, S. F., Curry, T. R., & Lee, G. (2006). Gender differences in criminal sentencing: Do effects vary across violent, property, and drug offenses? *Social Science Quarterly, 87*(2), 318-339.
- Shover, N. & Honaker, D. (1991). The socially bounded decision-making of persistent property offenders. *Howard Journal of Criminal Justice, 31* 276-293.
- Spohn, C. & Holleran, D. (2002). The effect of imprisonment on the recidivism rates of felony offenders: A focus on drug offenders. *Criminology*, 40(2), 329-357.
- Visher, C. A., Winterfield, L., & Coggeshall, M. B. (2005). Ex-offender employment programs and recidivism: A meta-analysis. *Journal of Experimental Criminology*, 1(3), 295-315.
- Witte, A. D. (1976). Earnings and jobs of ex-offenders: A case study. *Monthly Labor Review*, 99(12), 31-39.

Appendix 1

Property Offenses as Defined by SB 5755 and HB 1885

- (i) Counterfeiting (RCW 9.16.035(4));
- (ii) Identity Theft 1 (RCW 9.35.020(2));
- (iii) Theft of Livestock 1 (RCW 9A.56.080);
- (iv) Trafficking in Stolen Property 1 (RCW 9A.82.050);
- (v) Unlawful Factoring of a Credit Card or Payment Card Transaction (RCW 9A.56.290(4)(b));
- (vi) Burglary 2 (RCW 9A.52.030);
- (vii) Organized Retail Theft 1 (RCW 9A.56.350(2));
- (viii) Retail Theft with Special Circumstances 1 (RCW 9A.56.360(2));
- (ix) Theft of Livestock 2 (RCW 9A.56.083);
- (x) Theft with the Intent to Resell 1 (RCW 9A.56.340(2));
- (xi) Trafficking in Stolen Property 2 (RCW 9A.82.055);
- (xii) Unlawful Hunting of Big Game 1 (RCW 77.15.410(3)(b));
- (xiii) Commercial Fishing Without a License 1 (RCW 77.15.500(3)(b));
- (xiv) Counterfeiting (RCW 9.16.035(3));
- (xv) Engaging in Fish Dealing Activity Unlicensed 1 (RCW 77.15.620(3)(b));
- (xvi) Health Care False Claims (RCW 48.80.030);
- (xvii) Identity Theft 2 (RCW 9.35.020(3));
- (xviii) Malicious Mischief 1 (RCW 9A.48.070);
- (xix) Organized Retail Theft 2 (RCW 9A.56.350(3));
- (xx) Possession of Stolen Property 1 (RCW 9A.56.150);
- (xxi) Possession of a Stolen Vehicle (RCW 9A.56.068);
- (xxii) Retail Theft with Special Circumstances 2 (RCW 9A.56.360(3));

(xxiii) Scrap Processing, Recycling, or Supplying Without a License (second or subsequent offense) (RCW 19.290.100(2)(b));

- (xxiv) Theft 1 (RCW 9A.56.030);
- (xxv) Theft of a Motor Vehicle (RCW 9A.56.065);
- (xxvi) Theft of Rental, Leased, Lease-purchased, or Loaned Property (valued at five thousand dollars or more) (RCW 9A.56.096(5)(a));
- (xxvii) Theft with the Intent to Resell 2 (RCW 9A.56.340(3));
- (xxviii) Trafficking in Insurance Claims (RCW 48.30A.015);

(xxix) Unlawful Factoring of a Credit Card or Payment Card Transaction (RCW 9A.56.290(4)(a));

- (xxx) False Verification for Welfare (RCW 74.08.055);
- (xxxi) Forgery (RCW 9A.60.020);
- (xxxii) Malicious Mischief 2 (RCW 9A.48.080);
- (xxxiii) Possession of Stolen Property 2 (RCW 9A.56.160);
- (xxxiv) Reckless Burning 1 (RCW 9A.48.040);
- (xxxv) Taking Motor Vehicle Without Permission 2 (RCW 9A.56.075);

(xxxvi) Theft 2 (RCW 9A.56.040);

(xxxvii) Theft of Rental, Leased, Lease-purchased, or Loaned Property (valued at seven hundred fifty dollars or more but less than five thousand dollars) (RCW 9A.56.096(5)(b));

(xxxviii) Unlawful Issuance of Checks or Drafts (RCW 9A.56.060);

(xxxix) Unlawful Possession of Fictitious Identification (RCW 9A.56.320(4));

(xl) Unlawful Possession of Instruments of Financial Fraud (RCW 9A.56.320(5));

(xli) Unlawful Possession of Payment Instruments (RCW9 A.56.320(2));

(xlii) Unlawful Possession of a Personal Identification Device (RCW 9A.56.320(3));

(xliii) Unlawful Production of Payment Instruments (RCW 9A.56.320(1));

(xliv) Unlawful Trafficking in Food Stamps (RCW 9.91.142);

(xlv) Unlawful Use of Food Stamps (RCW 9.91.144);